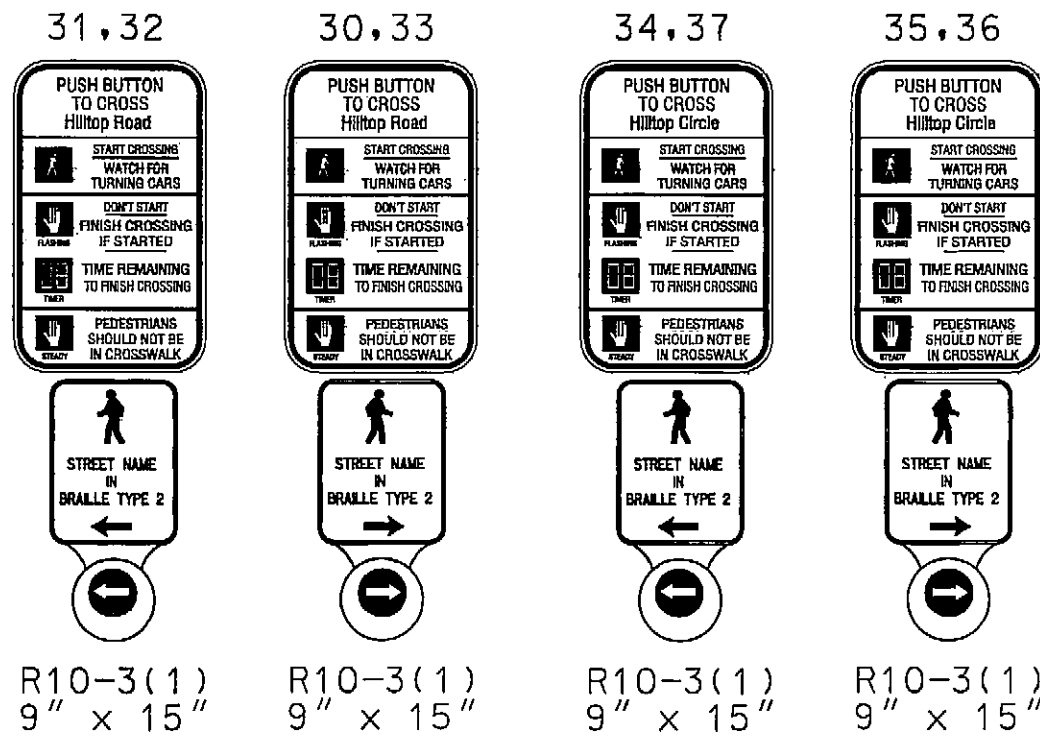
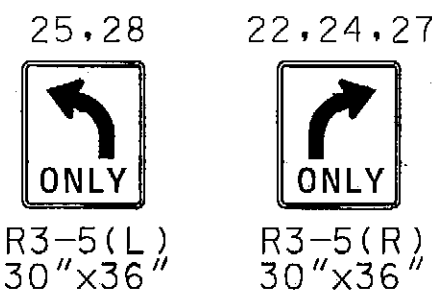


PROPOSED SIGNS



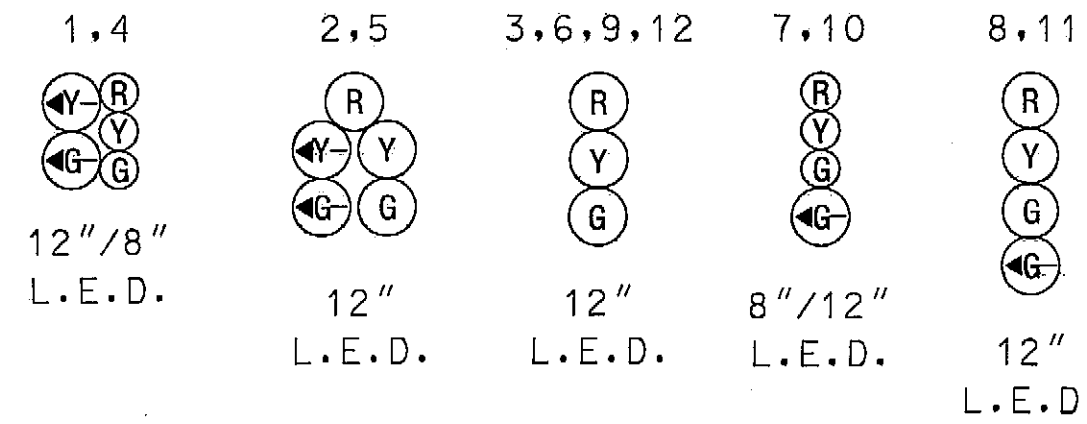
RELOCATED SIGNS



INSTALLED PER THE PAVEMENT MARKING AND SIGNING PLAN



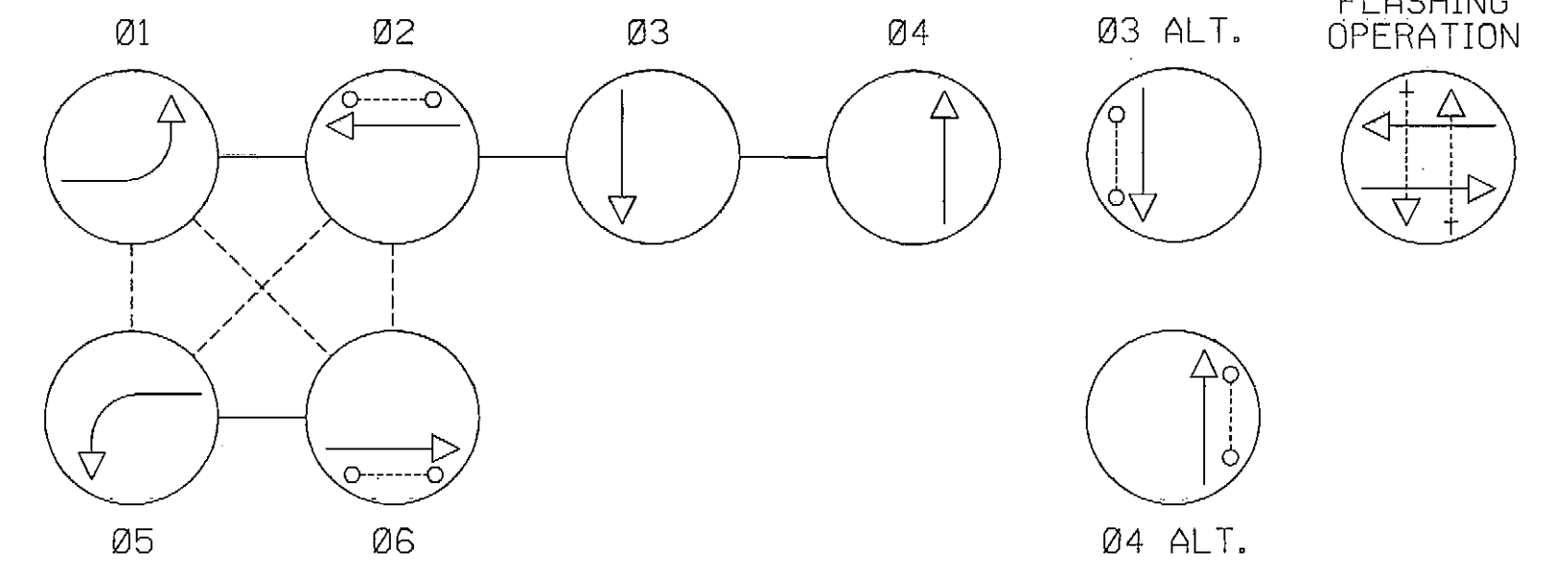
PROPOSED SIGNALS



PROPOSED VIDEO DETECTION

a, b, c, d

NEMA PHASING



GENERAL NOTES

1. VIDEO CAMERA LOCATION/ALIGNING SHALL BE COORDINATED WITH THE SHA ENGINEER.
2. THE CONTRACTOR SHALL VERIFY ALL PROPOSED POLE AND CABINET LOCATIONS PRIOR TO INSTALLATION.
3. PAVEMENT MARKINGS DETAILED ARE PROPOSED AND ARE TO BE INSTALLED BY THE CONTRACTOR IN ACCORDANCE WITH MD-SHA STANDARDS. ALL OTHER PAVEMENT MARKINGS ARE TO BE CONSIDERED AS EXISTING.
4. GEOMETRICS SHALL BE CONFIRMED PRIOR TO THE INSTALLATION OF SIGNAL EQUIPMENT. ALL TRAFFIC SIGNAL FOUNDATIONS SHALL BE INSTALLED AT FINAL SIDEWALK OR CURB GRADE FOR CLOSED SECTIONS, HIGHEST ROADWAY PROFILE GRADE FOR OPEN SECTIONS, TO MEET CLEARANCES AS SPECIFIED IN MD 816.03, MD 818.01, MD 818.02, MD 818.04. THE CONTRACTOR SHALL VERIFY ULTIMATE GRADES PRIOR TO THE INSTALLATION OF ALL SIGNAL EQUIPMENT.
5. ALL UNDERGROUND AND OVERHEAD UTILITIES SHOWN ON THESE PLANS ARE SCHEMATIC AND ARE NOT TO BE CONSIDERED COMPLETE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING ALL UTILITY COMPANIES PRIOR TO CONSTRUCTION SO THAT ALL UTILITIES MAY BE LOCATED IN THE FIELD. IF THE CONTRACTOR PERCEIVES THAT A CONFLICT BETWEEN THE UTILITIES AND THE TRAFFIC SIGNAL EQUIPMENT WILL OCCUR, THE CONTRACTOR SHALL NOTIFY THE APPROPRIATE PROJECT ENGINEER IMMEDIATELY.
6. PUSHBUTTONS ARE TO BE LOCATED SO THAT THEY CAN BE ACTIVATED BY A PERSON IN A WHEELCHAIR REACHING LESS THAN 18 IN. FROM A 60 IN. x 60 IN. LEVEL LANDING AREA WITH A CROSS SLOPE OF LESS THAN OR EQUAL TO 2%.
7. THE 10 FT. SEPARATION BETWEEN PUSHBUTTONS IS TO BE MEASURED FROM FACE OF PUSHBUTTON TO FACE OF PUSHBUTTON, NOT CENTER TO CENTER OF POLE.
8. PUSHBUTTON ARROWS ARE TO BE PARALLEL TO THE CROSSING FOR WHICH THEY ARE INTENDED.
9. THE LOCATION OF ACCESSIBLE PEDESTRIAN SIGNAL PUSHBUTTONS MUST MEET LOCATION REQUIREMENTS OF MUTCD SEC. 4E.09 & FIG 4E-2 AND THE NCHRP PUBLICATION, "ACCESSIBLE PEDESTRIAN SIGNALS: GUIDE TO BEST PRACTICE". IF NOT MET, THE CONTRACTOR IS TO STOP WORK ON PUSHBUTTON LOCATIONS UNTIL A DESIGN WAIVER IS OBTAINED, APPROVED BY THE DIRECTOR, OFFICE OF TRAFFIC AND SAFETY.
10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DELIVERING APS EQUIPMENT FOR PROGRAMING TO MD-SHA SIGNAL SHOP.
11. ALL UNUSED CABLE SHALL BE REMOVED.

CONSTRUCTION DETAILS

- A. INSTALL 27 FT. STEEL POLE WITH A 50 FT. MAST ARM, SIGNAL HEADS, SIGNS, VIDEO DETECTION CAMERAS, COUNTDOWN PEDESTRIAN SIGNAL HEAD, AUDIBLE PEDESTRIAN PUSHBUTTON, PUSHBUTTON SIGN, 20 FT. LUMINAIRE ARM, AND 250 WATT HPS LUMINAIRE (NOTE: ONE 3 IN. PVC SCHEDULE 80 CONDUIT BEND).
- B. INSTALL 27 FT. STEEL POLE WITH A 60 FT. MAST ARM, SIGNAL HEADS, SIGNS, VIDEO DETECTION CAMERAS, COUNTDOWN PEDESTRIAN SIGNAL HEAD, AUDIBLE PEDESTRIAN PUSHBUTTON AND PUSHBUTTON SIGN, 20 FT. LUMINAIRE ARM, AND 250 WATT HPS LUMINAIRE (NOTE: ONE 3 IN. PVC SCHEDULE 80 CONDUIT BEND).
- C. INSTALL 10 FT. STEEL PEDESTAL POLE WITH BREAKAWAY BASE, COUNTDOWN PEDESTRIAN SIGNAL HEAD, AUDIBLE PEDESTRIAN PUSHBUTTON AND PEDESTRIAN INSTRUCTIONAL SIGN (NOTE: ONE 3 IN. PVC SCHEDULE 80 CONDUIT BEND).
- D. INSTALL A NEMA SIZE 6 BASE MOUNTED CONTROLLER AND CABINET (NOTE: TWO-4 IN. PVC, AND TWO-2 IN. PVC SCHEDULE 80 CONDUIT BENDS).
- E. INSTALL AN UNMETERED EMBEDDED POWER PEDESTAL FOR AN UNDERGROUND ELECTRICAL SERVICE PROVIDED FROM UMBC.
- F. INSTALL HANDHOLE.
- G. INSTALL 2 IN. PVC SCHEDULE 80 ELECTRICAL CONDUIT - TRENCHED.
- H. INSTALL 3 IN. PVC SCHEDULE 80 ELECTRICAL CONDUIT - TRENCHED.
- J. INSTALL 3 IN. PVC SCHEDULE 80 ELECTRICAL CONDUIT - TRENCHED DURING CONSTRUCTION.
- K. INSTALL 4 IN. PVC SCHEDULE 80 ELECTRICAL CONDUIT - TRENCHED.
- L. INSTALL 4 IN. PVC SCHEDULE 80 ELECTRICAL CONDUIT - BORED.
- M. 3 IN. CONDUIT FOR AN UNDERGROUND ELECTRICAL SERVICE FROM UMBC POWER FEED INSTALLED BY OTHERS.
- N. INSTALL 24 IN. HEAT APPLIED, WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKING FOR STOP LINE.
- O. INSTALL 12 IN. HEAT APPLIED, WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKING FOR CROSSWALK. BRICK PAVERS BY OTHERS.
- P. GROUND MOUNTED SIGN INSTALLED AS PART OF THE PAVEMENT MARKING AND SIGNING PLAN.
- Q. REMOVE EXISTING CABINET AND CONTROLLER.
- R. REMOVE EXISTING STEEL POLE AND ALL ATTACHED EQUIPMENT. REMOVE POLE BASE 12 IN. BELOW GRADE.
- S. CAP AND ABANDON EXISTING CONDUIT.
- T. ABANDON EXISTING VEHICLE DETECTION.
- U. RELOCATE EXISTING STREET NAME SIGN FROM SPAN WIRE TO MAST ARM. USE NEW MAST ARM ASTRO BRACKET.

NOTE:
ADA ACCESSIBLE RAMPS SHALL
BE INSTALLED BASED ON
STANDARD MD 655.12.

NOTE:
EXISTING CROSSWALKS AND STOP BARS ARE TO BE
REMOVED BY GRINDING AND ARE NOT SHOWN FOR
CLARITY PURPOSES. SEE THE PAVEMENT MARKING
AND SIGNING PLAN SHEET 3 OF 3 FOR DETAILS.

THESE PLANS ARE APPROVED FOR CONSTRUCTION FOR A PERIOD OF 1 YEAR FROM THE DATE OF APPROVAL.
SHOULD CONSTRUCTION NOT BEGIN WITHIN THIS TIME FRAME THESE PLANS SHALL BE NULL AND VOID
WITHOUT A REVIEW FROM THE TRAFFIC ENGINEERING DESIGN DIVISION.

The Traffic Group, Inc.
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410-931-6600
1-800-583-8411
Fax 410-931-6601
"Merging Innovation and Excellence"

GEOMETRIC LEGEND	
—	EXISTING
---	PROPOSED
UTILITY LEGEND	
—SD—SD—	STORM DRAIN
—G—G—	GAS MAIN
—W—W—	WATER MAIN
—S—S—	SEWER MAIN
—E—E—	ELECTRIC CABLES
—A—A—	AERIAL CABLES
—T—T—	TELEPHONE CABLES
—F—F—	FIBER-OPTIC

APPROVALS	
TEAM LEADER	
ASST. DIR. CHIEF	
DIVISION CHIEF	
OFFICE DIRECTOR	

REVISIONS	
1	REBUILD TRAFFIC SIGNAL DUE TO GEOMETRIC CHANGES. UPDATE PDS TO COUNTDOWN APS. SHA No. 5W985046. NOVEMBER 18, 2010
2	MODIFY EXISTING TRAFFIC SIGNAL HEADS TO BLACK FACE. SHA No. AT9126185. MARCH 4, 2007

SHA STATE OF MARYLAND DEPARTMENT OF TRANSPORTATION STATE HIGHWAY ADMINISTRATION OFFICE OF TRAFFIC & SAFETY TRAFFIC ENGINEERING DESIGN DIVISION UMBC HILLTOP CIRCLE AT HILLTOP ROAD ARBUS, MD	
TRAFFIC SIGNAL PLAN	
SCALE: 1" = 20'	DATE: _____ CONTRACT NO.: _____
DESIGNED BY: _____	COUNTY: BALTIMORE
DRAWN BY: _____	LOGMILE: _____
CHECKED BY: _____	TMS NO.: K333
F.A.P. NO.: N/A	TOD NO.: N/A
TS No. 478 z	DRAWING SG-01 OF 01 SHEET NO. 1 OF 2

PLOTTED: Friday, November 19, 2010 AT 01:28 PM
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